

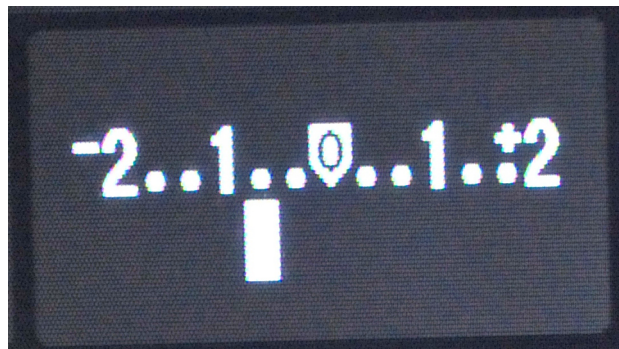
# METERING

Proper exposure is essential in photography. The act of metering is reading the amount of light falling on your subject and then determining what aperture/shutter speed combination is appropriate for the ISO value your camera is set to.

Underexposure is when your image appears too dark on your screen. Too fast of a shutter speed was used or your aperture was too small (your fStop number was too large) for the ISO value your camera was set to.

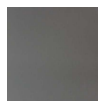
Over exposure is when your image appears too bright on your screen. Too slow of a shutter speed was used or your aperture was too large (your fStop number was too small) for the ISO value your camera was set to.

To use a DSLR's lightmeter, point your camera at your subject and press the button down partway. A little diagram should show up on your screen and in your viewfinder at the bottom:



Your goal is to adjust your shutter speed & aperture until the hatchmark lines up under the center, under 0. The 0 means that your exposure will not be off according to the light your camera is reading. -1 means it will be underexposed 1 stop (half as much light hit the sensor as was needed) and +1 means it will be over exposed 1 stop (twice as much light hit the sensor as was needed. If in doubt, err toward the +1 as more information can be salvaged from an overexposure than one with less information recorded.

All light meters are calibrated to read 18% gray. Special cards of that shade are made for using in determining exposure, although equivalents are easily found in everyday objects such as green grass and faded blue jeans.

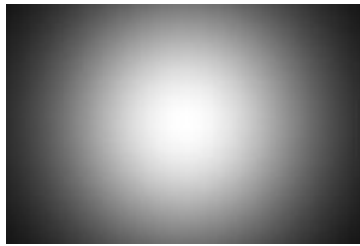


In other words, be cautious what you choose to meter. Your camera does not know that you may be photographing an albino wearing all white in the snow

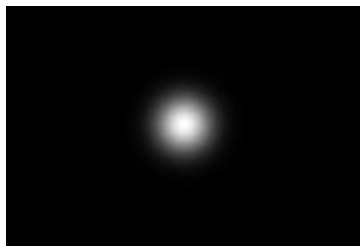
and you may inadvertently end up with an underexposed image because the camera will assume there is more light there than actually is present and misread the situation. Conversely, if you're photographing a black car on freshly sealed pavement, the camera may misread the scene as being dark and thereby overexpose it more than needed.

There are different modes for metering on most DSLRs:

*Evaluative, Matrix, Overall, Multisegment, or Zone Metering* – The camera attempts to take into consideration everything in your frame, assessing overall lighting and taking a best guess by averaging them to come up with an exposure setting. Most of the time this gives very good results when you do not have a specially calibrated 18% gray card.



*Spot Metering* – This is indicated by a tiny hollow square in the middle of the viewfinder. It takes all of its information from what is within that square and ignores everything else in the frame. It is very useful in tricky lighting situations where the whole scene is either light or darker than the point you want to be exposed correctly, as in a backlit portrait. Spot metering allows you to meter just the subject's face so as they won't end up as a silhouette. This is also when you're using a specially calibrated 18% gray card – making sure the card is in the same light as your subject, use the spot meter to meter the card and then make the exposure at that reading.



*Center Weighted Metering* – Is indicated by the square and a grid in the viewfinder. Exposure value is determined with information from a wider area within the center of your image than spot metering. Metering points around the frame add information but the weight of the value is given to those in the center.

